

CLAIMS

1. Lamellar sedimentation module including two plates fixed together, at least one of these plates having corrugations the crests and the troughs whereof are inclined to a first edge of this plate at a non-zero angle and delimit with the other plate inclined sedimentation tubes, characterized in that the two plates (2, 3) have the same corrugated profile and are fixed together in connecting areas defining a plane of symmetry (P) for the tubes (4) defined by these plates.

5 2. Module according to claim 1, characterized in that the angle of inclination ( $\alpha$ ) is in the range 45°-65°.

10 3. Module according to claim 2, characterized in that the angle of inclination is in the range 55°-60°.

15 4. Module according to any one of claims 1 to 3, characterized in that the crests (2A, 3A) and the troughs (2B, 3B) are of trapezoidal shape so that the sedimentation tubes are of hexagonal shape.

20 5. Module according to any one of claims 1 to 4, characterized in that the crests and the troughs have identical profiles.

25 6. Module according to any one of claims 1 to 5, characterized in that the two plates are symmetrical to each other with respect to a plane of symmetry of the tubes.

7. Module according to any one of claims 1 to 6, characterized in that the plates are identical to each other.

30 8. Module according to any one of claims 1 to 7, characterized in that the plates are of rectangular shape.

35 9. Module according to any one of claims 1 to 8, characterized in that the tubes are rectilinear throughout their length.

10. Lamellar sedimentation system including at least one block (10) formed of a plurality of plates at least one pair whereof constitute a module according to any one of claims 1 to 9.

5        11. System according to claim 10, characterized in that the block (10) includes at least two modules assembled so that these modules conjointly delimit other tubes (4'), these modules being fixed together in areas defining a plane of symmetry for these other tubes.

10        12. System according to claim 11, characterized in that these other tubes (4') have the same section as the tubes (4) of each module.

15        13. System according to any one of claims 10 to 12, characterized in that the modules are identical to each other.

14. System according to any one of claims 10 to 13, characterized in that the block is of rectangular parallelepiped shape, the plates being parallel to one of the faces of this block.

20        15. System according to claim 14, characterized in that the plates are perpendicular to the smallest dimension of the block.

25        16. System according to any one of claims 10 to 15, characterized in that the block is disposed so that the plates are vertical and the first edge is horizontal.

17. System according to claim 16, characterized in that the block is provided with attachment members by means whereof this block may be handled.

30        18. System according to claim 17, characterized in that the block is suspended from a fixed portion of the system.

19. System according to any one of claims 10 to 16, characterized in that the block rests on a fixed portion of the system.

35        20. System according to any one of claims 10 to

19, characterized in that it includes at least two juxtaposed identical blocks so that the tubes of one of the blocks are in line with the tubes of the other block.

5 21. System according to any one of claims 10 to 20, characterized in that the block is disposed near a tank wall to which the plates are perpendicular, leaving a space between this block and this wall.

10 22. System according to any one of claims 10 to 21, characterized in that the tubes have a hydraulic diameter from 40 mm to 100 mm.

23. System according to any one of claims 10 to 22, characterized in that the tubes have a length from 15 to 30 times their hydraulic diameter.